

09/314,493

438/64

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=> d his 17

(FILE 'USPAT' ENTERED AT 14:32:59 ON 23 SEP 1999)
L7 2654 S BOND PAD

=> d his 110

(FILE 'USPAT' ENTERED AT 14:32:59 ON 23 SEP 1999)
L10 175261 S SEMICONDUCTOR

=> d his 161-

(FILE 'USPAT' ENTERED AT 14:32:59 ON 23 SEP 1999)
L61 60589 S SOC
L62 2149 S MCM
L63 766 S CSP
L64 1558 S SUBSTRATE ON CHIP
L65 114 S MULTIPLE-CHIP MODULE
L66 54 S CHIP SIZE PACKAGE
L67 0 S BONDING-WIRE WINDOWS
L68 0 S BOND WIRE WINDOWS
L69 1704 S BOND WIRE
L70 0 S MSOCM
L71 0 S MSOCM ASSEMBLY
L72 2 S MULTIPLE-SUBSTRATE-ON-CHIP-MODULE
L73 26964 S ADHESIVE LAYER
L74 938 S VIA CONNECTORS
L75 705 S METAL TRACES
L76 174 S LAND GRID ARRAY
L77 1692 S SOLDER BALLS
L78 420 S SOLDER MASKS
L79 0 S BURN-IN TEST PINS
L80 0 S L61 AND L62 AND L63
L81 0 S L64 AND L65 AND L66
L82 15 S L61 AND L64
L83 37 S L62 AND L65
L84 28 S L63 AND L66
L85 646 S L69 AND L7
L86 22 S L77 AND L78
L87 0 S L85 AND L86
L88 0 S L73 AND L74 AND L75 AND L76
L89 10 S L73 AND L76
L90 1 S L74 AND L75
L91 3461 S L10 AND L61
L92 734 S L10 AND L62
L93 212 S L10 AND L63
L94 0 S L91 AND L92 AND L93
L95 0 S L73 AND L74 AND L75
L96 0 S L10 AND L61 AND L7 AND L77 AND L73
L97 2 S L10 AND L61 AND L7 AND L77

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1. 5,703,753, Dec. 30, 1997, Mounting assembly for multiple chip module with more than one substrate and computer using same; Sammy L. Mok,

361/715; 174/16.3; 257/712, 718; 361/707, 785; 439/66, 485 [IMAGE AVAILABLE]

2. 5,566,263, Oct. 15, 1996, System for tuning an integrated optical switch element; Terry L. Smith, et al., 385/40; 250/227.11; 385/16, 31, 45 [IMAGE AVAILABLE]

=> d 197 1-2

1. 5,907,189, May 25, 1999, Conformal diamond coating for thermal improvement of electronic packages; Atila Mertol, 257/787; 251/104; 257/77, 701, 706, 712, 738, 741, 788, 789, 796 [IMAGE AVAILABLE]

2. 5,780,928, Jul. 14, 1998, Electronic system having fluid-filled and gas-filled thermal cooling of its **semiconductor** devices; Michael D. Rostoker, et al., 257/713, 714, 715 [IMAGE AVAILABLE]

=> d 190 1

1. 5,748,912, May 5, 1998, User-removable central processing unit card for an electrical device; Sherman Lee, 710/102; 395/527; 710/101, 103, 126, 129 [IMAGE AVAILABLE]

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1. 5,935,687, Aug. 10, 1999, Three dimensional package and architecture for high performance computer; Evan Ezra Davidson, et al., 428/195; 174/261; 361/784; 428/209, 210, 901 [IMAGE AVAILABLE]

2. 5,931,685, Aug. 3, 1999, Interconnect for making temporary electrical connections with bumped semiconductor components; David R. Hembree, et al., 439/74 [IMAGE AVAILABLE]

3. 5,915,977, Jun. 29, 1999, System and interconnect for making temporary electrical connections with bumped semiconductor components; David R. Hembree, et al., 439/74 [IMAGE AVAILABLE]

4. 5,844,419, Dec. 1, 1998, Method for testing semiconductor packages using decoupling capacitors to reduce noise; Salman Akram, et al., 324/755, 765 [IMAGE AVAILABLE]

5. 5,817,986, Oct. 6, 1998, Three dimensional package and architecture for high performance computer; Evan Ezra Davidson, et al., 174/250, 262, 263, 264, 265 [IMAGE AVAILABLE]

6. 5,815,000, Sep. 29, 1998, Method for testing semiconductor dice with conventionally sized temporary packages; Warren M. Farnworth, et al., 324/755, 758 [IMAGE AVAILABLE]

7. 5,721,496, Feb. 24, 1998, Method and apparatus for leak checking unpackaged semiconductor dice; Warren M. Farnworth, et al., 324/765, 755 [IMAGE AVAILABLE]

8. 5,651,493, Jul. 29, 1997, Method of performing solder joint analysis of semi-conductor components; James D. Bielick, et al., 228/105, 103 [IMAGE AVAILABLE]

9. 5,500,280, Mar. 19, 1996, Elastomer-based connector sheet; Kouichi Yamazaki, et al., 428/220, 221, 357, 387, 390, 391, 418, 450, 901, 902 [IMAGE AVAILABLE]

10. 5,495,397, Feb. 27, 1996, Three dimensional package and architecture

for high performance computer; Evan E. Davidson, et al., 361/784, 785,
790 [IMAGE AVAILABLE]

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1. 5,895,562, Apr. 20, 1999, Gas shielding during plating; Valery Dubin,
205/137, 157, 162, 239, 291; 428/687 [IMAGE AVAILABLE]

2. 5,833,820, Nov. 10, 1998, Electroplating apparatus; Valery Dubin,
204/212; 118/50.1, 416, 504; 204/224R, 277 [IMAGE AVAILABLE]

3. 5,817,545, Oct. 6, 1998, Pressurized underfill encapsulation of
integrated circuits; Kuo K. Wang, et al., 438/127, 126 [IMAGE AVAILABLE]

4. 5,814,530, Sep. 29, 1998, Producing a sensor with doped
microcrystalline silicon channel leads; Chuang-Chuang Tsai, et al.,
438/30, 50, 151 [IMAGE AVAILABLE]

5. 5,766,934, Jun. 16, 1998, Chemical and biological sensors having
electroactive polymer thin films attached to microfabricated devices and
possessing immobilized indicator moieties; Anthony Guiseppi-Elie,
435/287.9; 204/403, 418; 435/817 [IMAGE AVAILABLE]

6. 5,733,804, Mar. 31, 1998, Fabricating fully self-aligned amorphous
silicon device; Michael G. Hack, et al., 438/158, 160, 949 [IMAGE
AVAILABLE]

7. 5,717,223, Feb. 10, 1998, Array with amorphous silicon TFTs in which
channel leads overlap insulating region no more than maximum overlap;
Michael G. Hack, et al., 257/57, 59, 72; 349/42 [IMAGE AVAILABLE]

8. 5,522,962, Jun. 4, 1996, Method of forming electrically conductive
structured sheets; David C. Koskenmaki, et al., 156/272.4, 273.9, 275.7;
427/128, 129, 130, 131, 132, 547, 598 [IMAGE AVAILABLE]

9. 5,443,876, Aug. 22, 1995, Electrically conductive structured sheets;
David C. Koskenmaki, et al., 428/41.3, 323, 343 [IMAGE AVAILABLE]

10. 5,075,253, Dec. 24, 1991, Method of coplanar integration of
semiconductor IC devices; John W. Sliwa, Jr., 438/109; 29/832; 257/723;
438/25 [IMAGE AVAILABLE]

11. 4,990,462, Feb. 5, 1991, Method for coplanar integration of
semiconductor ic devices; John W. Sliwa, Jr., 438/107; 29/834, 836;
148/DIG.28; 257/661, 730, 776 [IMAGE AVAILABLE]

12. 4,277,742, Jul. 7, 1981, Absolute humidity sensors and methods of
manufacturing humidity sensors; Michael G. Kovac, et al., 324/689;
219/209, 501; 324/687 [IMAGE AVAILABLE]

13. 4,203,087, May 13, 1980, Absolute humidity sensors and methods of
manufacturing humidity sensors; Michael G. Kovac, et al., 338/35;
73/335.02; 205/157; 324/690; 427/102, 103; 438/49, 382 [IMAGE AVAILABLE]

14. 4,143,177, Mar. 6, 1979, Absolute humidity sensors and methods of
manufacturing humidity sensors; Michael G. Kovac, et al., 427/79;
73/335.05; 324/687; 338/35; 427/80, 102, 103 [IMAGE AVAILABLE]

15. 3,875,321, Apr. 1, 1975, Glassy or crystalline material for
phototropic thin layers; Georg Gliemeroth, et al., 428/432; 252/584, 586;
359/241; 427/164, 166, 167; 428/913; 430/962; 501/13 [IMAGE AVAILABLE]

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1. 5,953,589, Sep. 1, 1999, Ball grid array semiconductor package with **solder balls** fused to printed circuit board and method for fabricating the same; Il Kwon Shim, et al., 438/106, 107, 108 [IMAGE AVAILABLE]
2. 5,936,848, Aug. 10, 1999, Electronics package that has a substrate with an array of hollow vias and **solder balls** that are eccentrically located on the vias; Behrooz Mehr, et al., 361/777; 174/260, 261, 262, 263, 264, 265; 228/180.21, 180.22; 257/692, 698, 723, 724, 737, 738, 774; 361/760, 772, 774, 779, 783 [IMAGE AVAILABLE]
3. 5,903,051, May 11, 1999, Electronic component and method of manufacture; Jeffrey A. Miks, et al., 257/700; 174/52.4; 257/698, 773 [IMAGE AVAILABLE]
4. 5,897,334, Apr. 27, 1999, Method for reproducing printed circuit boards for semiconductor packages including poor quality printed circuit board units and method for fabricating semiconductor packages using the reproduced printed circuit boards; Sun Ho Ha, et al., 438/107, 4, 15 [IMAGE AVAILABLE]
5. 5,863,970, Jan. 26, 1999, Epoxy resin composition with cycloaliphatic epoxy-functional siloxane; Ramkrishna Ghoshal, et al., 523/434, 427; 525/481, 484, 488, 525 [IMAGE AVAILABLE]
6. 5,818,697, Oct. 6, 1998, Flexible thin film ball grid array containing solder mask; Gregg Joseph Armezzani, et al., 361/749; 174/254, 255; 257/700, 737, 738, 774, 778, 779; 361/750, 751, 767, 779; 439/66, 83 [IMAGE AVAILABLE]
7. 5,796,586, Aug. 18, 1998, Substrate board having an anti-adhesive solder mask; Shaw Wei Lee, et al., 361/748; 174/256, 258, 259, 260; 257/723 [IMAGE AVAILABLE]
8. 5,783,870, Jul. 21, 1998, Method for connecting packages of a stacked ball grid array structure; Shahram Mostafazadeh, et al., 257/791, 686, 777, 778; 361/733, 735, 744, 764, 784, 803 [IMAGE AVAILABLE]
9. 5,755,893, May 26, 1998, Flux removing compositions; Francis R. Cala, et al., 134/2, 39; 510/175, 176, 178, 423, 424, 426, 433, 500, 511 [IMAGE AVAILABLE]
10. 5,710,071, Jan. 20, 1998, Process for underfilling a flip-chip semiconductor device; Stanley C. Beddingfield, et al., 438/108; 257/778; 438/126, 127 [IMAGE AVAILABLE]
11. 5,688,753, Nov. 18, 1997, Flux removing composition; Francis R. Cala, et al., 510/175; 134/2, 39; 510/177, 423, 424, 426, 433, 500, 511 [IMAGE AVAILABLE]
12. 5,650,914, Jul. 22, 1997, Compliant thermal connectors, methods of making the same and assemblies incorporating the same; Thomas H. DiStefano, et al., 361/704; 29/890.03; 165/185; 174/16.3; 257/713, 719 [IMAGE AVAILABLE]
13. 5,557,844, Sep. 24, 1996, Method of preparing a printed circuit board; Anilkumar C. Bhatt, et al., 29/852, 830; 156/89.18; 174/266; 427/97 [IMAGE AVAILABLE]
14. 5,557,501, Sep. 17, 1996, Compliant thermal connectors and assemblies incorporating the same; Thomas H. DiStefano, et al., 361/704; 165/185; 174/16.3; 257/713, 719 [IMAGE AVAILABLE]
15. 5,487,218, Jan. 30, 1996, Method for making printed circuit boards

with selectivity filled plated through holes; Anilkumar C. Bhatt, et al., 29/852; 174/262, 2066; 427/97 [IMAGE AVAILABLE]

16. 5,482,736, Jan. 9, 1996, Method for applying flux to ball grid array package; Thomas P. Glenn, et al., 427/96; 228/35, 207; 427/259, 310 [IMAGE AVAILABLE]

17. 5,409,863, Apr. 25, 1995, Method and apparatus for controlling adhesive spreading when attaching an integrated circuit die; Keith G. Newman, 29/827; 156/295; 438/118 [IMAGE AVAILABLE]

18. 5,403,671, Apr. 4, 1995, Product for surface mount solder joints; Damian J. Holzmann, 428/601; 174/261; 428/687 [IMAGE AVAILABLE]

19. 5,395,040, Mar. 7, 1995, Apparatus for forming surface mount solder joints; Damian J. Holzmann, 228/254; 118/58, 213 [IMAGE AVAILABLE]

20. 5,357,672, Oct. 25, 1994, Method and system for fabricating IC packages from laminated boards and heat spreader; Keith G. Newman, 29/830, 417, DIG.40 [IMAGE AVAILABLE]

21. 5,310,574, May 10, 1994, Method for surface mount solder joints; Damian J. Holtmann, 427/58, 96, 369, 370, 374.4, 376.7 [IMAGE AVAILABLE]

22. 5,218,234, Jun. 8, 1993, Semiconductor device with controlled spread polymeric underfill; Kenneth R. Thompson, et al., 257/787, 738, 774, 778, 792; 361/773 [IMAGE AVAILABLE]

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1. 5,951,804, Sep. 14, 1999, Method for simultaneously manufacturing chip-scale package using lead frame strip with a plurality of lead frames; Young Do Kweon, et al., 156/244.12; 29/856, 881; 156/300; 264/272.17 [IMAGE AVAILABLE]

2. 5,949,142, Sep. 7, 1999, **Chip size package** and method of manufacturing the same; Masashi Otsuka, 257/737, 703, 783, 789, 793 [IMAGE AVAILABLE]

3. 5,936,309, Aug. 10, 1999, Mounted structure of printed circuit board in semiconductor package; Woo-Young Kim, 257/779; 174/261; 257/714, 780, 781, 783, 786; 361/767, 768, 771 [IMAGE AVAILABLE]

4. 5,925,934, Jul. 20, 1999, Low cost and highly reliable chip-sized package; Thiam Beng Lim, 257/778; 174/52.4; 228/180.22; 257/670, 673, 693, 737, 738, 787 [IMAGE AVAILABLE]

5. 5,925,931, Jul. 20, 1999, Semiconductor device having interconnect lines and connection electrodes formed in groove portions of an insulating layer; Mitsuhiko Yamamoto, 257/737, 738, 758, 778, 780, 784, 786 [IMAGE AVAILABLE]

6. 5,923,529, Jul. 13, 1999, Card slot unit for a personal computer; Motomu Mimachi, 361/684, 785; 439/65 [IMAGE AVAILABLE]

7. 5,920,118, Jul. 6, 1999, **Chip-size package** semiconductor; Byoung Sik Kong, 257/684, 778 [IMAGE AVAILABLE]

8. 5,914,274, Jun. 22, 1999, Substrate on which bumps are formed and method of forming the same; Kazufumi Yamaguchi, et al., 438/690; 216/11, 14, 52; 438/694 [IMAGE AVAILABLE]

9. 5,909,010, Jun. 1, 1999, **Chip size package**; Tatsuo Inoue, 174/260; 361/783 [IMAGE AVAILABLE]

10. 5,899,376, May 1999, Transfer of flux onto electrodes and production of bumps on electrodes; Kouhei Tatumi, et al., 228/223, 36, 106 [IMAGE AVAILABLE]
11. 5,894,107, Apr. 13, 1999, **Chip-size package (CSP)** using a multi-layer laminated lead frame; Kyu Jin Lee, et al., 174/52.2, 52.4; 257/676, 693, 738, 778, 787 [IMAGE AVAILABLE]
12. 5,889,333, Mar. 30, 1999, Semiconductor device and method for manufacturing such; Masashi Takenaka, et al., 257/783, 690, 737, 780 [IMAGE AVAILABLE]
13. 5,886,409, Mar. 23, 1999, Electrode structure of wiring substrate of semiconductor device having expanded pitch; Masakazu Ishino, et al., 257/737, 693, 700, 738, 778, 784 [IMAGE AVAILABLE]
14. 5,874,784, Feb. 23, 1999, Semiconductor device having external connection terminals provided on an interconnection plate and fabrication process therefor; Kazumasa Aoki, et al., 257/787, 666, 676, 692, 737, 738, 778, 782, 792; 361/813; 438/124 [IMAGE AVAILABLE]
15. 5,863,812, Jan. 26, 1999, Process for manufacturing a multi layer bumped semiconductor device; Kamran Manteghi, 438/108, 118, 613 [IMAGE AVAILABLE]
16. 5,859,924, Jan. 12, 1999, Method and system for measuring object features; Kuo-Ching Liu, et al., 382/145; 250/559.23, 559.34; 356/375; 382/154, 172 [IMAGE AVAILABLE]
17. 5,858,806, Jan. 12, 1999, Method of bonding IC component to flat panel display; Kazuto Nishida, 438/7, 15, 118, 119 [IMAGE AVAILABLE]
18. 5,858,584, Jan. 12, 1999, Positive photosensitive resin composition and electronic apparatus using the same; Yoshiaki Okabe, et al., 430/18, 192, 193, 326, 330 [IMAGE AVAILABLE]
19. 5,837,427, Nov. 17, 1998, Method for manufacturing build-up multi-layer printed circuit board; Se Meyung Hwang, et al., 430/312; 427/98; 430/313, 324, 329 [IMAGE AVAILABLE]
20. 5,834,844, Nov. 10, 1998, Semiconductor device having an element with circuit pattern thereon; Masatoshi Akagawa, et al., 257/734, 700, 723, 737, 738, 758, 781 [IMAGE AVAILABLE]
21. 5,828,224, Oct. 27, 1998, Test carrier for semiconductor integrated circuit and method of testing semiconductor integrated circuit; Shigeyuki Maruyama, 324/755; 269/8 [IMAGE AVAILABLE]
22. 5,817,194, Oct. 6, 1998, Tin base soldering/brazing material; Shozo Nagai, et al., 148/400, 22; 420/557, 560 [IMAGE AVAILABLE]
23. 5,789,757, Aug. 4, 1998, Maleimide containing formulations and uses therefor; Frank D. Husson, Jr., et al., 252/183.11 [IMAGE AVAILABLE]
24. 5,760,471, Jun. 2, 1998, Semiconductor device having an inner lead extending over a central portion of a semiconductor device sealed in a plastic package and an outer lead exposed to the outside of a side face of the plastic package; Tetsuya Fujisawa, et al., 257/692, 666, 686, 693, 696, 698, 723 [IMAGE AVAILABLE]
25. 5,691,913, Nov. 25, 1997, Layout designing apparatus for circuit boards; Masayuki Tsuchida, et al., 395/500.09, 500.16 [IMAGE AVAILABLE]
26. 5,686,172, Nov. 11, 1997, Metal-foil-clad composite ceramic board

and process for the production thereof; Kazuyuki Ohya et al., 156/89.28, 89.16, 306.3, 307.7, 74/250, 255, 258; 264/628, 638, 361/748, 750; 427/96, 238, 294; 427/307.3, 320.2, 337, 409, 901, 911 [IMAGE AVAILABLE]

X-27. 5,650,667, Jul. 22, 1997, Process of forming conductive bumps on the electrodes of semiconductor chips using lapping and the bumps thereby created; Shiann-Ming Liou, 257/780; 228/180.22 [IMAGE AVAILABLE]

28. 5,643,802, Jul. 1, 1997, Method of producing a semiconductor device by gang bonding followed by point bonding; Chikara Yamashita, 228/110.1, 180.22 [IMAGE AVAILABLE]

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X8-1. 5,946,559, Aug. 31, 1999, Membrane dielectric isolation IC fabrication; Glenn Joseph Leedy, 438/157, 149, 283 [IMAGE AVAILABLE]

2. 5,931,311, Aug. 3, 1999, Module handling apparatus and method with rapid switchover capability; Fred Goins, III, 209/573; 198/735.3, 836.4; 324/73.1 [IMAGE AVAILABLE]

3. 5,920,126, Jul. 6, 1999, Semiconductor device including a flip-chip substrate; Tsuyoshi Sohara, 257/778 [IMAGE AVAILABLE]

4. 5,912,044, Jun. 15, 1999, Method for forming thin film capacitors; Mukta Shaji Farooq, et al., 427/79; 29/25.42; 427/80, 97, 125, 534, 555; 438/381, 387, 396, 706 [IMAGE AVAILABLE]

X90-4-5. 5,869,354, Feb. 9, 1999, Method of making dielectrically isolated integrated circuit; Glenn Joseph Leedy, 438/110; 148/DIG.135; 438/53, 128, 459, 977 [IMAGE AVAILABLE]

6. 5,854,534, Dec. 29, 1998, Controlled impedance interposer substrate; Solomon I. Beilin, et al., 257/691, 698, 700, 723; 313/505, 506; 361/794 [IMAGE AVAILABLE]

X-7. 5,840,593, Nov. 24, 1998, Membrane dielectric isolation IC fabrication; Glenn Joseph Leedy, 438/6, 618, 778, 928, 967, 977 [IMAGE AVAILABLE]

X-8. 5,834,334, Nov. 10, 1998, Method of forming a multi-chip module from a membrane circuit; Glenn Joseph Leedy, 438/107, 14, 17, 117 [IMAGE AVAILABLE]

9. 5,817,533, Oct. 6, 1998, High-yield methods of fabricating large substrate capacitors; Bidyut K. Sen, et al., 438/4, 14, 250, 393 [IMAGE AVAILABLE]

10. 5,808,872, Sep. 15, 1998, Semiconductor package and method of mounting the same on circuit board; Atsushi Ozawa, 361/760; 257/684, 690, 780, 784; 361/748, 751, 764 [IMAGE AVAILABLE]

11. 5,789,937, Aug. 4, 1998, Impedance self-adjusting driver circuit; Tai Any Cao, et al., 326/30, 86, 87 [IMAGE AVAILABLE]

12. 5,786,629, Jul. 28, 1998, 3-D packaging using massive fillo-leaf technology; Sadeg Mustafa Faris, 257/686, 685, 723, 724 [IMAGE AVAILABLE]

13. 5,781,446, Jul. 14, 1998, System and method for multi-constraint domain electronic system design mapping; Tom J. Wu, 395/500.1, 500.09 [IMAGE AVAILABLE]

14. 5,748,452, May 5, 1998, Multi-electronic device package; Joseph Michael Londa, 361/790; 257/686, 712, 713, 738; 361/707, 721, 761, 764,

15. 5,734,000, Mar. 31, 1998, Silicon based lacquer, its use as a substrate coating and substrates thus obtained; Michael Popall, et al., 528/32; 427/387, 515; 428/447; 528/10 [IMAGE AVAILABLE]

16. 5,729,433, Mar. 17, 1998, **Multiple chip module** assembly for top of mother board; Sammy L. Mok, 361/704; 257/727; 361/719 [IMAGE AVAILABLE]

17. 5,707,782, Jan. 13, 1998, Photoimageable, dielectric, crosslinkable copolyesters; James Economy, et al., 430/285.1, 286.1, 287.1; 522/104, 105, 107; 525/442, 450 [IMAGE AVAILABLE]

X 18. 5,703,753, Dec. 30, 1997, Mounting assembly for **multiple chip module** with more than one substrate and computer using same; Sammy L. Mok, 361/715; 174/16.3; 257/712, 718; 361/707, 785; 439/66, 485 [IMAGE AVAILABLE]

19. 5,668,237, Sep. 16, 1997, Silicon and zirconium based lacquer, its use as a substrate coating and substrates thus obtained; Michael Popall, et al., 528/9, 10, 32, 43, 395 [IMAGE AVAILABLE]

20. 5,667,077, Sep. 16, 1997, Module handling apparatus and method with rapid switchover capability; Fred Goins, III, 209/573; 198/735.3, 836.4; 324/73.1 [IMAGE AVAILABLE]

X 21. 5,654,220, Aug. 5, 1997, Method of making a stacked 3D integrated circuit structure; Glenn Joseph Leedy, 438/25, 26, 109, 406, 456, 619, 977 [IMAGE AVAILABLE]

22. 5,640,327, Jun. 17, 1997, Apparatus and method for partitioning resources for interconnections; Benjamin S. Ting, 395/500.08, 500.09, 500.13 [IMAGE AVAILABLE]

X 23. 5,637,907, Jun. 10, 1997, Three dimensional semiconductor circuit structure with optical interconnection; Glenn J. Leedy, 257/434, 80 [IMAGE AVAILABLE]

5 24. 5,635,761, Jun. 3, 1997, Internal resistor termination in multi-chip module environments; Tai A. Cao, et al., 257/700, 684, 693, 698, 705, 707, 760 [IMAGE AVAILABLE]

~~25. 5,635,754, Jun. 3, 1997, Radiation shielding of integrated circuits and multi-chip modules in ceramic and metal packages; David J. Strobel, et al., 257/659, 660, 699, 708, 710; 361/816, 818, 820 [IMAGE AVAILABLE]~~

26. 5,633,209, May 27, 1997, Method of forming a circuit membrane with a polysilicon film; Glenn J. Leedy, 473/228; 148/DIG.135; 216/79, 99 [IMAGE AVAILABLE]

27. 5,619,399, Apr. 8, 1997, **Multiple chip module** mounting assembly and computer using same; Sammy L. Mok, 361/707; 257/718; 361/715, 718; 439/66, 487 [IMAGE AVAILABLE]

X 28. 5,592,018, Jan. 7, 1997, Membrane dielectric isolation IC fabrication; Glenn J. Leedy, 257/619, 419, 447, 632 [IMAGE AVAILABLE]

6 X 29. 5,592,007, Jan. 7, 1997, Membrane dielectric isolation transistor fabrication; Glenn J. Leedy, 257/347, 329, 419, 508, 663 [IMAGE AVAILABLE]

30. 5,580,687, Dec. 3, 1996, Contact stepper printed lithography method; Glenn J. Leedy, 430/5, 311, 313 [IMAGE AVAILABLE]

31. 5,571,741, Nov. 5, 1996, Membrane dielectric isolation IC fabrication; Glenn Leedy, 438/27, 29, 413 [IMAGE AVAILABLE]

32. 5,544,088, Aug. 6, 1996, Method of I/O pin assignment in a hierarchial packaging system; Matthew E. Aubertine, et al., 395/500.14, 500.13; 710/129 [IMAGE AVAILABLE]

33. 5,354,695, Oct. 11, 1994, Membrane dielectric isolation IC fabrication; Glenn J. Leedy, 438/411; 148/DIG.135; 438/107, 421, 622, 928, 977 [IMAGE AVAILABLE]

34. 5,317,479, May 31, 1994, Plated compliant lead; Deepak K. Pai, et al., 361/773; 174/260; 257/692; 361/764, 776, 783, 813 [IMAGE AVAILABLE]

35. 5,294,039, Mar. 15, 1994, Plated compliant lead; Deepak K. Pai, et al., 228/180.22; 29/830; 228/175, 254 [IMAGE AVAILABLE]

36. 5,222,014, Jun. 22, 1993, Three-dimensional multi-chip pad array carrier; Paul T. Lin, 361/792; 29/739, 840; 228/180.22; 257/701, 712, 723; 361/729 [IMAGE AVAILABLE]

37. 5,189,505, Feb. 23, 1993, Flexible attachment flip-chip assembly; Dirk J. Bartelink, 257/419, 747, 774, 776, 778 [IMAGE AVAILABLE]